

Original Paper

Effect of moderate period of progressive anaerobic training on serum level of superoxide dismutase and Catalase in female rats

Modir M (M.Sc)¹, Daryanoosh F (Ph.D)*², Firouzmand H (M.Sc)³, Yosefie H (M.Sc)¹

¹M.Sc in Physical Education, Sport Science Branch, Shiraz University, Shiraz, Iran. ²Associate Professor, Department of Physical Education, Sport Science Branch, Shiraz University, Shiraz, Iran. ³M.Sc in Biology, Cellular and Molecular Branch, Department Research and Development Samen Pharmaceutical Company, Mashhad, Iran.

Abstract

Background and Objective: Different physical activities affect on anti-oxidative system. Variety, period and intensity of activities are necessary in health improvement. This study was carried out to determine the effect of medium period of progressive anaerobic training on serum level of superoxide dismutase and Catalase in female rats.

Methods: In this experimental study, 30 female rats were randomly allocated into control and anaerobic training groups. The training program lasted for 8 weeks with control (without activity) and anaerobic including 3 sessions in a week with speed of 24-30 meters per minute in slope range (5<slope>15) for 30 seconds.

Results: Serum level of superoxide dismutase was significantly increased in progressive anaerobic training group (109.1±17.3 U/ml) in compare to controls (98.8±12.8 U/ml) (P<0.05). Serum level of Catalase was 51.2±7.2 and 48.4±4.2 U/ml in control and progressive anaerobic training, respectively. This difference was not significant.

Conclusion: The medium period of progressive anaerobic training influences serum level of superoxide dismutase and Catalase in female rats.

Keywords: Anaerobic training, Superoxide dismutase, Catalase, Rat

* **Corresponding Author:** Daryanoosh F (Ph.D), E-mail: daryanoosh@shirazu.ac.ir

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